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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,566	08/22/2003	Thomas Christoffel	041176/260794	9747
826	7590 04/09/2004		EXAMINER	
	& BIRD LLP	WHITE, RODNEY BARNETT		
BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000			ART UNIT	PAPER NUMBER
CHARLOT	CHARLOTTE, NC 28280-4000			
			DATE MAII ED: 04/09/2004	

DATE MAILED: 04/09/200

Please find below and/or attached an Office communication concerning this application or proceeding.

, ,					
,	Application No. Applicant(s)				
	10/646,566	CHRISTOFFEL ET AL.			
' Office Action Summary	Examiner	Art Unit			
	Rodney B. White	3636			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 24 N	ovember 2003.				
2a) This action is <b>FINAL</b> . 2b) ☐ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) Claim(s) 1-20 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-4 and 7-11 is/are rejected.  7) Claim(s) 5,6 and 12-20 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 11/24/03.</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-152)			

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## **DETAILED ACTION**

## Claim Objections

Claim 1 is objected to because of the following informalities: Claim 1 has some awkward language such as "for there being relative rotation" and "pivotally borne".

Such language should be changed to more suitable language.. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Seibold (U.S. Patent No. 6,209,955).

Seibold teaches the structure as claimed (See Figures 2 and 4-6)

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Claims 1-4 and 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Whalen (U.S. Patent No. 5,476,307).

Whalen teaches the structure as claimed (See Figures 1-3)

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansel et al (U.S. Patent No. 6,540,232).

Hansel et al teach the structure as claimed (See Figures 1-3).

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Boltze et al (U.S. Patent No. 6,598,938).

Boltze et al teach the structure as claimed (See Figures 1 and 3-4).

Claims 5-6 and 12-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art does not teach that structure of the second mouths as defined in claims 5, 12, 14, and 16.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Deptolla, Ward et al, Brambilla, Allen, and Ziegler et al, teach structure similar to the present invention .

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney B. White whose telephone number is (703) 308-2276. The examiner can normally be reached on 5:30 AM-3:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (703) 308-0827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney B. White, Patent Examiner Art unit 3636 April 5, 2004

Roaney S. White Patent Examiner